From: Hanley, Mary
Location: Ex. 6 - Personal Privacy
Importance: Normal
Subject: FW: Internal Call: RE: Sen. Feinstein CA Wastewater inquiry
Start Date/Time: Tue 3/3/2015 8:30:00 PM
End Date/Time: Tue 3/3/2015 9:30:00 PM

David,
I wanted to make sure that you were going to be on this call tomorrow as I will need to follow up with you. I will only make the first half of the meeting.
Thanks
Mary

-----Original Appointment-----
From: Janifer, Pamela
Sent: Monday, March 02, 2015 12:16 PM
To: Janifer, Pamela; Montgomery, Michael; Albright, David; Bergman, Ronald; Grevatt, Peter; Hanley, Mary; Maier, Brent; Perry, Dale; Telleen, Katherine; Conerly, Octavia; Davis, CatherineM; Nguyen, Loan
Cc: Greene, Ashley
Subject: Internal Call: RE: Sen. Feinstein CA Wastewater inquiry
When: Tuesday, March 03, 2015 3:30 PM-4:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Ex. 6 - Personal Privacy

UPDATE: I've learned that R9 has been engaged with Sen. Feinstein office in responding to questions about the wastewater issue as well. Below are responses R9 has already provided to Feinstein's staff. This should give more of a flavor of questions staff may want more clarification on.

Sen. Feinstein's office has requested a briefing this week to discuss wastewater disposal in California and EPA's assessment of California's DOGGR agency

Staff would like to discuss recent news reports, including reports that EPA has found that DOGGR permitted hundreds of disposal wells in aquifers with potable water, that 98% of waste water samples from fracked oil wells exceed standards for benzene concentrations, and reports that companies have been disposing of wastewater in unpermitted open pits.

http://www.latimes.com/local/california/la-me-fracking-20150211-story.html#page=1
http://www.latimes.com/local/lanow/la-me-ln-pits-oil-wastewater-20150226-story.html

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Below is more information for you regarding wastewater discharges from oil and gas processing facilities in California. I am also working a separate response to your other inquiry regarding air emissions from oil and gas processing facilities.

Below is a summary of EPA Region 9's review of the state of California's Underground Injection Control (UIC) Class II Program. And attached is a Dec. 22 EPA letter to the state requesting submittal by Feb. 6 a plan to achieve compliance with the Safe Drinking Water Act (SDWA) -- as was mentioned in the SF Chronicle and other news articles you may have seen this week.

> On July 17 and December 22, 2014, U.S. EPA Region 9 sent letters to California's Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) and Water Resources Control Board (Water Board) (collectively, the State) highlighting concerns, providing direction and requesting information about DOGGR's implementation of its underground injection control program for oil and gas-related (Class II) wells. EPA Region 9 audited DOGGR's Class II UIC primacy program in 2011 and identified substantial implementation deficiencies and, in 2012, conducted a review of aquifer exemptions that raised questions about the alignment of injection wells with EPA-approved exemption boundaries. EPA's letters responded to DOGGR's lack of progress in addressing these issues over the prior two years. Further, in the first half of 2014, the State identified some injection wells that the State had authorized to inject Class II fluids into aquifers with less than 3,000 ppm Total Dissolved Solids (a category of aquifers that would typically warrant protection for potential future use as drinking water under the Safe Drinking Water Act), that EPA had not exempted, and the State subsequently shut down these injection wells. EPA has been meeting regularly with senior officials with the Department of Conservation, DOGGR, the Water Board and the Central Valley Regional Water Board to discuss the State's ongoing assessment of drinking water sources that may be impacted by improper injection, documentation pertaining to aquifer exemptions in California, and specific data about any Class II injection wells that may be injecting into non-exempt aquifers. EPA's December 22 letter directs the State to submit a Program Revision Plan by February 6, 2015 providing for full compliance with the SDWA by February 2017. While EPA's letter directed the State to ensure that the Plan will bring the State's injection program back into full compliance with the Safe Drinking Water Act (SDWA) by 2017, EPA and the State will also continue to pursue immediate action to shut down any injection wells that are found to be in close proximity to current drinking water supply wells.

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As requested, below is additional information on regulating air emissions from oil and gas facilities in California. As you are aware, EPA does not have exclusive jurisdiction here -- the primary regulatory authority is at the state and local levels. In the oil producing areas of Kern County, San Joaquin Valley and the Los Angeles basin, air emissions are regulated by the South Coast Air Quality Management District and the San Joaquin Valley Air Pollution Control District. EPA has approved both air districts' State Implementation Plans' (SIP) oil, gas, refinery and gas transfer rules. The federally-approved SIP rules - listed below - are enforceable by EPA as well as the air districts.

South Coast Air Quality Management District SIP Rules
http://yosemite.epa.gov/R9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=South+Coast+Air+Quality+Management+District-Agency-Wide+Provisions
Oil and Gas Rules

> 1148.1 Oil and Gas Production Wells - controls VOCs from wellheads and well cellars from onshore facilities with requirements on VOC concentration in well cellars, liquid accumulated in wells, liquid and gas leaks, and inspections
> 1176 VOC Emissions from Wastewater Separators - controls VOCs by requiring closed systems

Refinery and Gas Transfer Rules

> 461 Gasoline Transfer and Dispensing - controls VOCs by requiring CARB certified Phase I and II vapor

recovery systems
462 Organic Liquid Loading - controls VOCs from loading into tank truck, trailer, or railroad tank cars by requiring vapor recovery or disposal systems and recordkeeping at such facilities
463 Organic Liquid Storage - controls VOCs on above ground storage tanks by requiring tanks maintain a working pressure or vapor control devices, tank roof requirements, inspection, maintenance, and recordkeeping
464 Wastewater Separators - controls VOCs by requiring covers on wastewater separators
465 Refinery Vacuum Producing Devices or Systems - controls VOC and SOx by requiring covers and collection of exhaust gases
466 Pumps and Compressors - controls VOCs from pumps and compressors by requiring inspections and repairs on leaks and recordkeeping of inspections
468 Sulfur Recovery Units - controls SOx emissions with emission limits for sulfur compounds and hydrogen sulfide.
469 Sulfuric Acid Units - controls SOx emissions with emission limits for sulfur compounds
1105.1 Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units- controls PM10 and Ammonia by setting emission limits on the units and requiring monitoring and reporting
1118 Control of Emissions from Refinery Flares - controls flaring by requiring flare minimization plans and reporting
1119 Petroleum Coke Calcining Operations- Oxides of Sulfur - controls SOx by requiring SOx emissions from coke calcining equipment is reduced.
1123 Refinery Process Turnarounds - controls VOCs by requiring the vapors are collected before vessels are depressurized and recordkeeping of turnarounds
1173 Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants - controls VOCs by defining leak rates, requiring inspection, maintenance, and recordkeeping
1178 Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities - controls VOCs with specific requirements on fixed, floating, and domed roofs on tanks, monitoring requirements, and recordkeeping requirements.

San Joaquin Valley Air Pollution Control District SIP Rules
http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=San+Joaquin+Valley+Unified+APCD-Agency-Wide+Provisions

Oil and Gas Rules

4311 Flares - requires flares above a threshold have a flare minimization plan, to minimize flaring
4401 Steam-Enhanced Crude Oil Production Wells- controls VOCs from steam enhanced wells by requiring VOC control systems, leak detection and repair, and inspection
4402 Crude Oil Production Sumps- controls VOCs from crude oil and wastewater sumps by requiring closed systems and recordkeeping
4403 Components Serving Light Crude Oil and Gases as Light Crude Oil and Gas Production Facilities and Components of Natural Gas Processing Facilities- controls VOCs from light crude oil and gas production by requiring closed systems, leak detection and repair
4404 Heavy Oil Test Station- Kern County - controls VOCs from heavy oil test stations by requiring VOC capture
4407 In-Situ Combustion Well Vents - controls VOCs from in-situ combustion wells by requiring VOC capture and abatement, inspection and maintenance, and recordkeeping
4408 Glycol Dehydration Systems - controls VOCs from glycol dehydration by requiring vent gas capture, combustion, or other control, and recordkeeping
4409 Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities - controls VOCs from light crude oil production, natural gas productions, and processing facilities by requiring leak detection and repair, inspection, and recordkeeping

Refinery and Gas Transfer Rules

4451 Valves, Pressure Relief Valves, Flanges, Threaded Connections, and Process Drains at Petroleum Refineries and Chemical Plants - controls VOCs from petroleum refineries and chemical plants by requiring

leak detection and repair, inspection, and recordkeeping
4452 Pumps and Compressor Seals at Petroleum Refineries and Chemical Plants - controls VOCs by requiring leak detection and repair, inspection, and recordkeeping
4453 Refinery Vacuum Producing Devices or Systems - controls VOCs by requiring covers on hot wells and accumulators as and vapor collection
4454 Refinery Process Unit Turnaround - controls VOCs by requiring vapors be recovered, controlled, or flared when a vessel is depressurized prior to a turnaround
4455 Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants - controls VOCs from components at petroleum refineries, gas liquids processing facilities, and chemical plants by requiring leak detection and repair, inspection, and recordkeeping
4621 Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants - controls VOCs by requiring phase CARB certified I vapor recovery systems
4623 Storage of Organic Liquids - controls VOCs by requiring specific VOC control systems depending on size and type of tank
4624 Transfer of Organic Liquids - controls VOCs with emission limits, requirements for closed vapor systems, and recordkeeping
4625 Wastewater Separators - controls VOCs by requiring covers or vapor recovery systems, inspection, and recordkeeping

Below are links to relevant fact sheets on EPA's proposed air rules for the oil and gas industry.

U.S. EPA Proposed Refinery New Source Performance Standards (NSPS): On May 15, 2014 EPA proposed emission control requirements for storage tanks, flares and coking units at petroleum refineries. We also proposed to require monitoring of air concentrations at the fenceline of refinery facilities to ensure proposed standards are being met and that neighboring communities are not being exposed to unintended emissions. http://www.epa.gov/airtoxics/petrefine/20140515factsheet.pdf

U.S. EPA Proposed NSPS for well completion, storage tanks and natural gas processing plants: On July 1, 2014 EPA proposed updates to the 2012 NSPS for the oil and natural gas industry. http://www.epa.gov/ http://www.epa.gov/airquality/oilandgas/pdfs/20140701fs.pdf